FEDERAL GRANT OPPORTUNITIES

updated 8/6/10

new opportunities or changes highlighted

Open grants & deadlines:

- **FY 2009 Global Climate Change Mitigation Incentive Fund (GCCMIF)**
- **Federal Loan Guarantees for Projects that Employ Innovative Energy Efficiency, Renewable Energy, & Advanced Transmission & Distribution Technologies** *(September 14, 2009-August 24, 2010; November 13, 2009-December 31, 2010)*
- **Solid-State Lighting U.S. Manufacturing – Round 2** (August 18, 2010)
- **Early Career Research Program** (Pre-Application due August 13, 2010, Final Application due November 9, 2010)
- **National Spherical Torus Experiment: Collaborative Research on Configuration Optimization** (Letter of Intent Due Date: August 19, 2010; Application Due Date: September 28, 2010)
- **Photovoltaic (PV) Manufacturing Initiative** (Questions Due; September 27, 2010; Full Application Due Date: October 10, 2010)

FY 2009 Global Climate Change Mitigation Incentive Fund (GCCMIF)

- Applications due: Rolling basis
- Visit http://www.eda.gov/ for additional information and for any programming changes
- GCCMIF established to strengthen the link between economic development and environmental quality
- GCCMIF finances projects that foster economic development by advancing the green economy in distressed communities
- Applications are competitive, based on the Economic Development Association's standard eligibility and distress criteria, investment policy guidelines, and funding priority considerations
- Projects must achieve the same job and capital investment outcomes as traditional EDA investments
- Project must be one of the following:
    - Renewable energy (wind, solar, biomass, and geothermal)
    - Energy efficiency
    - Reuse/Recycling/Restoration (reuse of a given product or production of a new or innovative product for recyclable materials; also includes ecosystem restoration)
    - Green building (new construction or renovation certified by USGBC in LEED or comparable certificate program
- Must result with outputs:
    - Development and/or manufacture of green end-product that furthers or contributes to sustainability and/or environmental quality (activity, item, plan, or program)
    - Greening of an existing function or process (investments that result in green enhancements to the resource, energy, water, and/or waste efficiency of an existing function or process)
    - Creation or renovation of a green building

ARRA - Federal Loan Guarantees for Projects that Employ Innovative Energy Efficiency, Renewable Energy, & Advanced Transmission & Distribution Technologies

Funding Opportunity Announcement (FOA) # DE-FOA-0000140

- Application due dates:
    - Parts I & II submission dates depend on rounds
    - Part I: September 14, 2009 – August 24, 2010
    - Part II: November 13, 2009 – December 31, 2010
- Submission of applications for loan guarantees under Title XVII of the Energy Policy Act of 2005 in support of debt financing for projects in the U.S. that employ energy efficiency, renewable energy, and advanced transmission and distribution technologies that constitute new or significantly improved technologies that are not a commercial technology
- DOE will make up to $8.5 billion in loan guarantee authority available
- Despite the due dates, the solicitation will remain open until the aggregate $8.5 billion in loan guarantee authority is fully obligated
- Visit http://www.fedconnect.net/ to view the full FOA, and consult http://www.energy.gov/, http://www.whitehouse.gov/omb/ or http://www.recovery.gov/ for additional information

- Only 3 categories of projects that begin construction no later than 9/30/11 are eligible under Section 1705 of Title XVII and may have their credit subsidy costs covered by appropriated funds under the Recovery Act
    1. Renewable energy systems, including incremental hydropower, that generate electricity or thermal energy and facilities that manufacture related components
    2. Electric power transmission system projects, including upgrading projects
    3. Leading edge biofuel projects that will use technologies performing at the pilot or demonstration scale that the Secretary determines are likely to become commercial technologies and will produce transportation fuels that substantially reduce life-cycle greenhouse gas emissions compared to other transportation fuels
- Eligible projects in categories listed below and which fall within 1 of the 2 distinct project types described:
    1. Alternative fuel vehicles
    2. Biomass
    3. Efficient electricity transmission, distribution, and storage
    4. Energy efficient building technologies and applications
    5. Geothermal
    6. Hydrogen and fuel cell technologies
    7. Energy efficiency projects
    8. Solar
    9. Wind & hydropower

- Technology categories for 1705 eligible projects are limited to renewable energy systems projects, electric power transmission systems projects, and leading edge biofuels projects
- Per DOE, eligible projects under categories 1, 4, 6, & 7 generally do not constitute 1705 eligible projects for which the credit subsidy costs may be paid for out of funds appropriated under the Recovery Act to pay for the costs of loan guarantee issued under the Section 1705 program
- Project types: manufacturing or stand-alone; see FOA for list of primary goals and objectives for these project types

Solid-State Lighting U.S. Manufacturing – Round 2

DE-FOA-0000334

- Application Due Date: 08/18/2010
- Registration Requirements: go to http://www.grants.gov for more information
  - Applicants must obtain a DUNS number. http://fedgov.dnb.com/webform
  - Applicants must register with the CCR. http://www.ccr.gov/
  - Applicants must register with Grants.gov. http://grants.gov/
  - Applicants must register with FedConnect. www.fedconnect.net
- Estimated Funding: Approximately $15,000,000 (2-8 awards expected)
  - Ceiling: None
  - Floor: None
  - Period of Performance: up to 2 years
- Eligible Applicants: All types of domestic entities including DOE/NNSA National Laboratories (as defined by EPAct 2005, Section 989) are eligible to apply, except for other Federal agencies and nonprofit organizations described in section 501(c)(4) of the Internal Revenue Code of 1986 that engaged in lobbying activities after December 31, 1995. The foreign subrecipient effort, in aggregate, shall not exceed 15% of the total estimated project costs, including both the applicant's and the foreign sub-recipient's portions of the effort.
- Cost Sharing: The cost share must be at least 20% of the total allowable costs for research and development projects (i.e., the sum of the Government share, including FFRDC contractor costs if applicable, and the recipient share of allowable costs equals the total allowable cost of the project) and must come from non-Federal sources unless otherwise allowed by law. (See 10 CFR 600 for the applicable cost sharing requirements.)
- Objecive: The primary objective of this Announcement is to achieve cost reduction of solid-state lighting for general illumination through improvements in manufacturing equipment, processes, or techniques. The secondary objective is to develop, establish, and/or maintain the technology and manufacturing base within the US. The specific Program Areas of Interest (AOI) are provided in the following section.
  - Program Area of Interest 1: LED Luminaire/Module Manufacturing
  - Program Area of Interest 2: LED Driver Manufacturing
  - Program Area of Interest 3: LED Test and Inspection Equipment
  - Program Area of Interest 4: Tools for Epitaxial Growth of LEDs
  - Program Area of Interest 5: LED Wafer Processing Equipment
  - Program Area of Interest 6: LED Packaging
  - Program Area of Interest 7: LED Phosphor Manufacturing and Application
  - Program Area of Interest 8: OLED Deposition and Patterning Equipment
  - Program Area of Interest 9: Integrated Manufacturing and Quality Control of OLEDs
  - Program Area of Interest 10: OLED Materials Manufacturing
  - Program Area of Interest 11: Back-End OLED Panel Fabrication

Early Career Research Program

DE-FOA-0000395

- Applications must be submitted through Grants.gov to be considered for award. You cannot submit an application through Grants.gov unless you are registered. Please read the registration requirements carefully and start the process immediately.
- There are several one-time actions you must complete in order to submit an application through Grants.gov (e.g., obtain a Dun and Bradstreet Data Universal Numbering System (DUNS) number, register with the Central Contract Registry (CCR), register with the credential provider, and register with Grants.gov). See http://www.grants.gov/GetStarted Use the Grants.gov Organization Registration Checklist at http://www.grants.gov/assets/OrganizationRegCheck.pdf to guide you through the process.
- Estimated Funding: $6,000,000 per year will be available under. Between 30 and 50 awards are anticipated, and applicants should request project support for five years. No Ceiling or Floor
- Minimum award size is $750,000, DOE expects the typical award size will be $750,000 over five years. Applicants are encouraged to propose research expenditures as close to the funding minimum as possible. Typical budgets will be $150,000 per year for five years.
- Eligible Applicants: Only U.S. academic institutions are eligible to apply. Other Federal agencies, Federally Funded Research and Development Center (FFRDC) Contractors, and nonprofit organizations described in section 501(c)(4) of the Internal Revenue Code of 1986 that engaged in lobbying activities after December 31, 1995 are not eligible to apply.
- Cost sharing is not required.
- Summary: The Office of Science of the Department of Energy hereby invites grant applications for support under the Early Career Research Program in the following program areas: Advanced Scientific Computing Research (ASCR); Biological and Environmental Research (BER); Basic Energy Sciences (BES), Fusion Energy Sciences (FES); High Energy Physics (HEP), and Nuclear Physics (NP). The purpose of this program is to support the development of individual research programs of outstanding scientists early in their careers and to stimulate research careers in the areas supported by the DOE Office of Science.
- Advanced Scientific Computing Research (ASCR): Program Website: http://www.sc.doe.gov/ascr
    - The mission of the Advanced Scientific Computing Research (ASCR) program is to discover, develop, and deploy computational and networking capabilities to analyze, model, simulate, and predict complex phenomena important to the Department of Energy. A particular challenge of this program is fulfilling the science potential of emerging multi-core computing systems and other novel “extreme-scale” computing architectures, which will require significant modifications to today’s tools and techniques.
- Biological and Environmental Research (BER: Program Website: http://www.sc.doe.gov/ober
    - The mission of the Biological and Environmental Research (BER) program is to understand complex biological, climatic, and environmental systems across spatial and temporal scales ranging from sub-micron to the global, from individual molecules to ecosystems, and from nanoseconds to millennia. This is accomplished by exploring the frontiers of genome-enabled biology; discovering the physical, chemical and biological drivers of climate change; and seeking the geochemical, hydrological, and biological determinants of environmental sustainability and stewardship.
- Basic Energy Sciences (BES): Program Website: http://www.sc.doe.gov/bes
    - The mission of the Basic Energy Sciences (BES) program is to support fundamental research to understand, predict, and ultimately control matter and energy at the

electronic, atomic, and molecular levels in order to provide the foundations for new energy technologies and to support DOE missions in energy, environment, and national security. The portfolio supports work in the natural sciences by emphasizing fundamental research in materials sciences, chemistry, geosciences, and biosciences. BES-supported scientific facilities provide specialized instrumentation and expertise that enable scientists to carry out experiments not possible at individual laboratories.

- Fusion Energy Sciences (FES): Program Website: http://www.science.doe.gov/ofes/
    - The mission of the Fusion Energy Sciences (FES) program is to expand the fundamental understanding of matter at very high temperatures and densities and to build the scientific foundations needed to develop a fusion energy source. This is accomplished by studying plasmas under a wide range of temperature and density conditions, developing advanced diagnostics to make detailed measurements of plasma properties, and creating theoretical/computational models to resolve the essential physics ideas and principles.
- High Energy Physics (HEP): Program Website: http://www.science.doe.gov/hep
    - The mission of the High Energy Physics (HEP) program is to understand how the universe works at its most fundamental level, which is done by discovering the elementary constituents of matter and energy, probing the interactions between them, and exploring the basic nature of space and time.
- Nuclear Physics (NP): Program Website: http://www.sc.doe.gov/np
    - The mission of the Nuclear Physics (NP) program is to discover, explore, and understand all forms of nuclear matter. The fundamental particles that compose nuclear matter—quarks and gluons—are relatively well understood, but exactly how they fit together and interact to create different types of matter in the universe is still largely not understood. To solve this mystery, the NP program supports experimental and theoretical research—along with the development and operation of particle accelerators and advanced technologies—to create, detect, and describe the different forms and complexities of nuclear matter that can exist in the universe, including those that are no longer found naturally in our universe.

National Spherical Torus Experiment: Collaborative Research on Configuration Optimization

DE-FOA-0000396

- PREAPPLICATION DUE DATE: August 19, 2010, (Preapplications are Required)
- APPLICATION DUE DATE: September 28, 2010
- Applications must be submitted through Grants.gov to be considered for award. You cannot submit an application through Grants.gov unless you are registered. Please read the registration requirements carefully and start the process immediately. Remember you have to update your CCR registration annually.
    - Applicants must register with the CCR. http://www.ccr.gov/
    - Applicants must register with Grants.gov. http://grants.gov/
    - Applicants, who are not registered with CCR and Grants.gov, should allow at least 21 days to complete these requirements.
- Estimated Funding: It is anticipated that up to $1.5 million from DOE/OFES for new collaborative research awards during FY 2011 will be available, contingent upon the availability of funds. Multi-year funding of grant awards is expected, with out-year support contingent upon the availability of appropriated funds in future years, progress of the research, and continuing program need. It is expected that up to 10 awards will be made, depending on the size of the awards. Most awards will be for 3 years and will range from $50,000 to $350,000 per year. DOE is under no obligation to pay for any costs associated with preparation or submission of applications.
- Eligible Applicants: All types of domestic entities are eligible to apply, except other Federal agencies, Federally Funded Research and Development Center (FFRDC) Contractors, and nonprofit organizations described in section 501(c)(4) of the Internal Revenue Code of 1986 that engaged in lobbying activities after December 31, 1995.
- Cost Sharing: None required
- Overview: Collaborative research on the National Spherical Torus Experiment (NSTX) at Princeton Plasma Physics Laboratory. The NSTX program contributes to two goals of the FES program: developing a predictive understanding of magnetically confined plasmas and investigating the unique properties of the spherical torus configuration. Applications for collaborative research focused primarily on implementing a diagnostic instrument on NSTX or on operating a diagnostic instrument and analyzing the resulting data should not be submitted in response to this FOA.
- The NSTX is a major facility designed to study the physics of fusion plasmas confined in a very low aspect-ratio Spherical Torus (ST) configuration. The ST is characterized by strong magnetic field curvature and high toroidal beta (the ratio of the average plasma pressure to the applied toroidal magnetic field pressure) due to its very low aspect ratio. These unique properties extend and complement the normal aspect ratio tokamak in addressing several overarching scientific issues in magnetic fusion energy science. The long-term programmatic goals of the NSTX program are to evaluate the attractiveness of a compact ST configuration, such as a Fusion Nuclear Science Facility (FNSF), as a cost-effective element in the development of practical fusion power, and to contribute to resolving important issues in predicting the physics of burning plasmas anticipated in ITER.
- The following research areas are included in this solicitation.
    - Macroscopic Stability
    - Multi-Scale Transport Physics

    - Plasma Boundary Interfaces
    - Energetic Particles
    - Start-up, Ramp-up, and Sustainment without a Solenoid
    - Advanced Operating Scenarios
- Collaboration: Because NSTX is a collaborative national program, all applicants must collaborate with researchers from other institutions who are part of the NSTX National Research Team. The team currently includes researchers from Princeton Plasma Physics Laboratory, industry, universities, and other DOE National Laboratories. Planning for collaborative research on NSTX must begin in advance of submitting an application. Thus, applications submitted in response to this notice must include a Record of Discussion indicating the benefits of proposed research to the planned 9 NSTX research program, the interface support required by the proposed collaborative work, and a description of how the proposed work will be integrated into the overall NSTX program.

Photovoltaic (PV) Manufacturing Initiative

DE-FOA-0000259

- Questions Due; September 27, 2010
- Full Application Due Date: October 10, 2010
- Registration Requirements
    - Applicants must obtain a DUNS number. http://fedgov.dnb.com/webform
    - Applicants must register with the CCR. http://www.ccr.gov/
    - Applicants must register with Grants.gov. http://grants.gov/
    - Applicants must register with FedConnect. www.fedconnect.net
- Type of Agreement: DOE anticipates awarding cooperative agreements (See Part VI.B.4 Statement of Substantial Involvement), or Technology Investment Agreements (TIAs) under this announcement.
- Estimated Funding: Approximately $125,000,000 is expected to be available for new awards under this announcement over five years. Approximately $15,000,000 is expected to be available for new awards in FY 2010 and an additional $110,000,000 is expected to be available for awards made under this announcement in years FY 2011 through FY2015.
    - DOE anticipates making at least two, and up to five, awards under this announcement depending on the size of the awards.
    - Award size: University Focused: $12.5M-$25M, Industry Focused: $33M-$100M
- Eligible Applicants: To be eligible to submit a Full Application to this Announcement, Applicants must have submitted a Concept Paper Application to FOA No. DE-FOA-0000237 by the required due date, passed the Concept Paper Application initial compliance review, and received DOE feedback. All domestic applicants were eligible to apply to FOA No. DE-FOA-0000237, except nonprofit organizations described in section 501(c)(4) of the Internal Revenue Code of 1986 that engaged in lobbying activities after December 31, 1995. The following domestic entities are eligible to apply under both topic areas for this announcement: (1) institutions of higher education; (2) nonprofit and for-profit private entities; (3) State and local governments; and (4) consortia of entities (1) through (3). All types of domestic entities are eligible to apply, except other Federal agencies, Federally Funded Research and Development Center (FFRDC) Contractors, and nonprofit organizations described in section 501(c)(4) of the Internal Revenue Code of 1986 that engaged in lobbying activities after December 31, 1995.
- Cost Sharing
    - Topic I: University-Focused - The cost share must be at least 20% of the total allowable costs for research and development projects (i.e., the sum of the Government share, including FFRDC contractor costs if applicable, and the recipient share of allowable costs equals the total allowable cost of the project) and must come from non-Federal sources unless otherwise allowed by law. (See 10 C.F.R. Part 600 for the applicable cost sharing requirements.) The mandatory cost share must be achieved on an annual basis.
    - Topic II: Industry-Focused - The cost share must be at least 50% of the total allowable costs (i.e., the sum of the Government share, including FFRDC contractor costs if applicable, and the recipient share of allowable costs equals the total allowable cost of the project) and must come from non-Federal sources unless otherwise allowed by law.
- Objectives: launch a PV Manufacturing Initiative that will support accelerated development for the U.S. PV industry. Applications under two separate topics are being sought in 2 areas:
    - University-Focused: designed to allow Universities to conduct industry-relevant research and development projects related to PV manufacturing. The University-Focused topic is

intended to provide universities with a competitive funding source to perform industry-relevant R&D, guided by direct industry input and oversight.

- Industry-Focused: designed to allow Industry to accelerate the development and implementation of PV manufacturing-related technologies through both collaborative and non-collaborative models. Intended to provide the U.S. PV industry with a resource to rapidly develop pre-competitive and competitive manufacturing technologies.
- The Industry-Focused topic is intended to also allow for the integration of university and workforce development initiatives; likewise, activities under the University-Focused topic are intended to have explicit industry support.